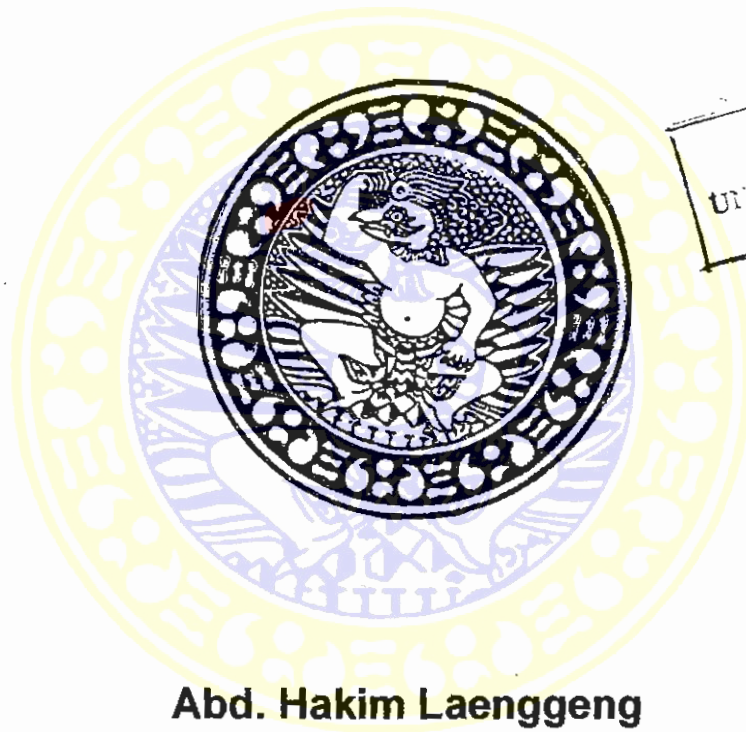


TESIS

**STUDI KANDUNGAN YODIUM, PROTEIN  
DAN SERAT BERBAGAI KONSENTRASI  
RUMPUT LAUT (*Eucheuma cottonii*) PADA  
PEMBUATAN TAHU RUMPUT LAUT**

**PENELITIAN EKSPERIMENTAL LABORATORIES**



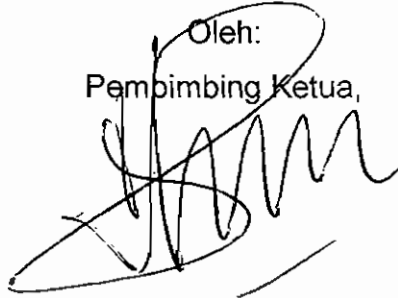
**Abd. Hakim Laenggeng**

**PROGRAM PASCASARJANA  
UNIVERSITAS AIRLANGGA  
SURABAYA  
2001**

bar Pengesahan:

**TESIS INI TELAH DISETUJUI  
PADA TANGGAL, 25 SEPTEMBER 2001**

Oleh:  
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R. Bambang Wirjatmadi, dr., MS., MCN., Ph.D.  
NIP: 130 610 098

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Kuntoro, dr., MPH., Dr.PH.  
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Mengetahui:

Ketua Program Studi Ilmu Kesehatan Masyarakat  
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Prof. H. Eddy Pranowo Soedibjo, dr., MPH.  
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## ABSTRACT

Seaweed tofu is a complemented tofu with seaweed of *Eucheuma cottonii*. The objective of this research was to identify nutrient content of seaweed tofu, particularly iodine, protein, and fiber, from various concentration increments and people's acceptability of the organoleptic aspects. In addition, economic aspects of seaweed tofu products were also studied to compare its efficiency with common tofu products.

Method used in this study was experimental laboratory method using Complete Randonized Design, consisting of 4 treatments ( $t = 4$ ) symbolized as  $T_0$  (control),  $T_1$  (10 % seaweed),  $T_2$  (20 % seaweed), and  $T_3$  (30 % seaweed), with 6 repetitions ( $r = 1, 2, 3, 4, 5, 6$ ). Data analysis was done using one way Anova test, and if difference was found, the test would be followed by Least Significant Difference (LSD) test. Organoleptic analysis (taste, color, aroma, and elasticity) was done using Friedman Two-way Anova test, and if significant difference was found, the test would be followed by multiple comparison test.

Results showed that the highest iodine level was found in  $T_3$  treatment (30 % seaweed), which was 81,00  $\mu\text{gr} / 100 \text{ gr}$  material. However, the iodine content decreased averagely 44,66 % per 100 gr after being fried.

The highest protein content was found in  $T_0$  treatment (control) of 13,08 % per 100 gr material, and the lowest was in  $T_3$  treatment (30 % seaweed) of 10,00 % per 100 gr material. The highest rough fiber content was found in  $T_3$  treatment (30 % seaweed) of 0,88 % per 100 gr material. Results of organoleptic test showed that seaweed concentration increase had no significant influence on taste, color, and aroma, but only on its elasticity. The best elasticity was obtained in  $T_1$  treatment (10 % seaweed).

Results of analysis of economic aspects of seaweed tofu showed that seaweed tofu production is more efficient than common tofu. Difference of production cost between common tofu and seaweed tofu was Rp. 2.330,50,- - Rp. 2.026,70,- = Rp. 306,80,-.

Keywords: Seaweed tofu, Iodine, Protein, Fiber and Organoleptic quality.

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DAN SERAT BERBAGAI KONSENTRASI  
RUMPUT LAUT (*Eucheuma cottonii*) PADA  
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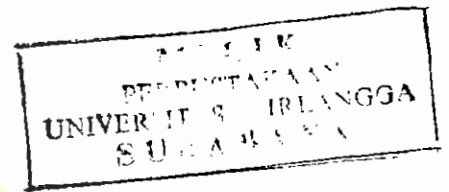
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RUMPUT LAUT (*Eucheuma cottonii*)  
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**TESIS**

Untuk memperoleh Gelar Magister  
Dalam Program Studi Ilmu Kesehatan Masyarakat  
Pada Program Pascasarjana Universitas Airlangga Surabaya

Oleh:

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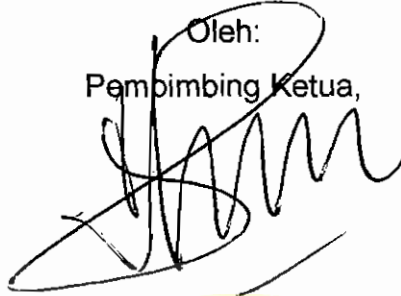
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**TESIS**

**KOMPARASI EFEKTIVITAS BOOKLET  
DENGAN LEAFLET DALAM MENINGKATKAN  
PENGETAHUAN DAN PERUBAHAN SIKAP SISWI  
TERHADAP ABORSI**

**(Studi di Kelas II SMUK YBPK I Surabaya)**



MILIK  
PERPUSTAKAAN  
UNIVERSITAS AIRLANGGA  
SURABAYA

**YOHANES KAMBARU WINDI**

**PROGRAM PASCASARJANA  
UNIVERSITAS AIRLANGGA  
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DALAM MENINGKATKAN PENGETAHUAN  
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TESIS

Untuk Memperoleh Gelar Magister  
Dalam Program Studi Ilmu Kesehatan Masyarakat  
Pada Program Pascasarjana Universitas Airlangga

Oleh

YOHANES KAMBARU WINDI  
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UNIVERSITAS AIRLANGGA  
SURABAYA

Tanggal 31 Agustus 2001

baran Pengesahan

TESIS INI TELAH DISETUJUI

TANGGAL 31 AGUSTUS 2001

Oleh

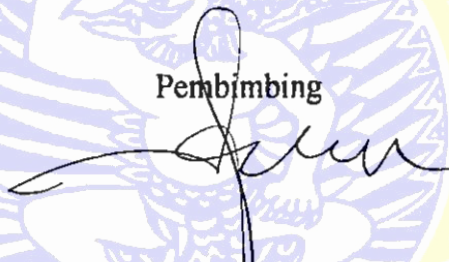
Pembimbing Ketua



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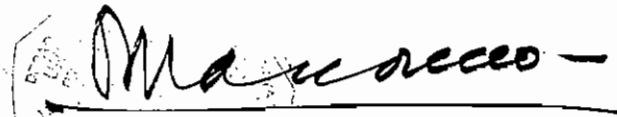
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Ketua Program Studi Ilmu Kesehatan Masyarakat

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Prof. Eddy Pranowo S., dr., MPH

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## ABSTRACT

Instructional media play an important role in teaching and learning process. Numbers of media proposed by educational scientists, demanding a creative lecturer to select the best amongst. Booklet and leaflet as printed media were implemented and analyzed throughout the time of educational scenes, health education as well.

Seeing the phenomenal increase of abortion cases among female teenagers, it requires health educators to promote knowledge and attitude change toward abortion through applying source of information that can be independently learned by the audiences. Booklet and leaflet were tentatively assumed to satisfy the audience's needs on information of abortion. This research, therefore, entitled "The Comparison of booklet effectiveness against leaflet to increase knowledge and attitude changes toward abortion among female student (A study in 2<sup>nd</sup> grade of SMUK YBPK I Surabaya).

The research was based on Quasi Experiment using Non-Randomized Control group Pre test-Post test Design. The samples were purposively distributed into two groups namely group which was booklet as intervention medium, while the other group was intervened by leaflet.

The t-test analyses showed that either booklet or leaflet effective to increase the student's knowledge and supports the attitude change toward abortion. The values of  $P(0,00) < 0,05$  indicated knowledge and attitude improvements of group exposed by booklet. The same result on leaflet group intervention, where the values of  $P(0,00) < 0,05$ , meaning there was significant improvement of knowledge and changes in attitude.

The t-test comparison of means for independent samples for both media showed that booklet more effective than leaflet to improve students knowledge of abortion. The value of  $P(0,02) < 0,05$ , concluded that there was significant difference between booklet and leaflet. While the value of  $P(0,795) > 0,05$  on attitude variable, illustrated that there was no significant difference between booklet and leaflet. It means either booklet or leaflet effective to change the attitude of students.

The statistical analyses above summarizes that booklet and leaflet have similar potential to improve the knowledge and change the attitude of students toward abortion. The comparison of both media, Leaflet was as effective as booklet to change students' attitude. Booklet, however, more effective than leaflet to improve the students' knowledge.

Based on the research results above, booklet and leaflet especially designed on the purpose of this research are, then, suggested to satisfy the audience's need on information of abortion. Both media, moreover, beneficial to develop for another fields of health education and health promotion.

### Key Words:

*Abortion, knowledge improvement, attitude change, behavior, booklet, leaflet.*